LONG BRANCH PUBLIC SCHOOLS

Pacing Guide - 6th Grade

Marking Period 1		Period 1	riod 1		FI A Con	nmon Core Stand	ards	1		
Dav	Unit	Topic	Desired Outcome	NGSS	Reading	Writing	S&L	Math	21st Century	Technology
	ng Day 1		Rules, Procedures, Syllabus							, , , , , , , , , , , , , , , , , , , ,
Openin	ng Day 2		Safety							
1 2			Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem	LS2-1	1 RST 6-8 7 1 '1					
3	Unit 1	Ecosystems	Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems	LS2-2		WHST.6-8.2,	8.4, SL	MP.4, 6.RP.A3, 6.EE.C.9,	9.1	8.1 & 8.2
5 6			Develop a model to describe the cycling of matter a flow of energy among living and nonliving parts of the ecosystem	L2-3		8.5	6.SP.B.5			
7			Summative Unit Assessment & Introduction to Green School Project 1	LS2-1, LS2-2, L2-3						
8 9 10		Biodiversity	Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations	LS2-4	RST. 6-8.1, RST. 6-8.7, RST. 6-8.8, RI 8.9	WHST.6-8.1, WHST.6-8.2, WHST.6-8.9	SL.8.1, SL	MP.4, 6.RP.A3, 6.EE.C.9, 6.SP.B.5	9.1	
11 12 13	Unit 2 and Populations		Evaluate completing design solutions for maintaining biodiversity and ecosystem services	LS2-5			8.4, SL 8.5			8.1 & 8.2
14			Summative Unit Assessment	LS2-4, LS2-5						
15			Analyze and interpret data for patterns in the fossil record that document the existence, diversity,	202 1) 202 3						
16			extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws	LS4-1	RST. 6-8.1, RST. 6-8.7, RST. 6-8.9	, WHST.6-8.1,		MP.4, 6.RP.A.1.		
17	Hoit 2	Unit 3 Biological Evolution	Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships	LS4-2						
19	Unit 3		Analyze displays of pictorial data to compare patterns of similarities in the embryological developments across multiple species to identify relationships not evident in the fully formed anatomy	LS4-3		WHST.6-8.1, WHST.6-8.2, WHST.6-8.9	SL 8.4	6.EE.B.6, 7.RP.A.2	9.1	8.1 & 8.2
20			Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment	LS4-4						
21			Summative Unit Assessment & Completion of Green School Project 1	LS4-1, LS4-3, LS4-2, LS4- 4						

Marking Period 2		eriod 2			ELA Common Core Standards]						
Day	Unit	Topic	Desired Outcome	NGSS	Reading	Writing	S&L	Math	21st Century	Technology			
1 2	Unit 4	Earth and the solar system			Develop and use a model of the Earth-Sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons	ESS1-1,	- RST.6-8.1.			MP.2, MP.4, –			
3 4 5	Offic 4				solar system	solar system	solar system	solar system	Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system	ESS1-2	RST.6-8.7	WHST.6-8.2	SL.8.5
6			Summative Unit Assessment & Introduction to Green School Project 2	ESS1-1, ESS1-2				7.EE.B.4					
7 8			Analyze and interpret data to determine scale properties of objects in the solar system	ESS1-3		' I WHST 6-8 2 I		MP.2, MP.4, 6.RP.A.1, 7.RP.A.2, 6.EE.B.6, 7.EE.B.4	9.1				
9 10 11 12	Unit 5	Scale and dimensions	Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history	ESS1-4	RST.6-8.1, RST.6-8.7		SL.8.5			8.1 & 8.2			
13			Summative Unit Assessment	ESS1-3, ESS1-4				7.EE.B.4					
14 15 16	Unit 6	Earth's resources	it 6	Construct a scientific explanation based on evidence for how the uneven distribution of Earth's mineral, energy and ground water resouces are the result of past and current geoscience processes	ESS3-1	RST.6-8.1, RST.6-8.7	WHST.6-8.1, WHST.6-8.2, WHST.6-8.7	MP.2, MP.4, 6.RP.A.1, 7.RP.A.2, 6.EE.B.6, 7.EE.B.4	9.1	8.1 & 8.2			
17 18			Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects	ESS3-2	K51.0-6.7	WHST.6-8.8, WHST.6-8.9							
19			Summative Unit Assessment & Completion of Green School Project 2	ESS3-1, ESS3-2				7.22.0.4					
20			Review for Midpoint Assessment										
21 22			Midpoint Assessment Midpoint Assessment										

M	larking F	Period 3	3		ELA Common Core Standards					
Day	Unit	Topic	Desired Outcome	NGSS	Reading	Writing	S&L	Math	21st Century	Technology
1			Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object	PS3-1	RST.6-8.1, RST.6-8.3, RST.6-8.7			MP. 2, 6. RP.A.1, 6 RP. A. 2, 7.RP. A.2, 8.EE.A.1,		8.1 & 8.2
2	Unit 7	Sound and Light	Develop a model to describe that when the arrangement of objects interacting at a distance changes different amounts of potential energy are stored in the system	PS3-2		WHST 6-8.1, WHST 6-8.7	SL.8.5			
4 5			Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy	1.31.0 0.7			8.EE.A.2, 8.F.A.3,			
6			Summative Unit Assessment & Introduction to Green School Project 3	PS3-1, PS3-2, PS3-3				6.SP.B.5		
7			Ask questions about data to determine the factors that affect the strength of electric and magnetic forces	PS2-3	RST.6-8.1, RST.6-8.3, RST.6-8.7	WHST 6-8.1, WHST 6-8.7		MP. 2, 6. RP.A.1, 6 RP. A. 2, 7.RP. A.2, 8.EE.A.1, 8.EE.A.2, 8.F.A.3, 6.SP.B.5	9.1	8.1 & 8.2
8	Unit 8	Electricity and Magnetism	Plan an investigation to determine the relationship among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy f thee particles as measured by the temperature of the sample:	PS3-4			SL.8.5			
10 11 12			Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object	PS3-5						
13			Summative Unit Assessment	PS3-4, PS3-5						
14			Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a	PS4-1	RST.6-8.1, RST.6-8.2, RST.6-8.9	WHST 6-8.9		MP.2, MP.4, 6.RP.A.1.	, 9.1 ,	8.1 & 8.2
15 16 17	Unit 9	Electricity and Magnetism and Space	Develop and use a model to describe that waves are reflected, absorbed, or transmitter through various materials	PS4-2						
17 18	Unit 9		Ask questions about data to determine the factors that affect the strength of electric and magnetic forces	PS2-3			SL.8.5	6.RP.A.3, 7.RP.A.2.		
19			Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.	PS2-5				8.F.A.3		
20			Summative Unit Assessment & Completion of Green School Project 3	PS4-1,PS4-2,PS2-3,PS4-5						
21 22			Various State Testing on Various Day in Marking Po	eriod 3						

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Day	Unit	Topic	Desired Outcome	NGSS	Reading	Writing	S&L	Math	21st Century	Technology			
1 2 3	Unit 10	Changing Earth			nit 1()	Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process	ESS2-1,	RST.6-8.1, WHST 6	WHST.6-8.2,		MP.2, 6.NS.C.5.		
4 5						Earth	Earth	Construct explanation based on evidence for how geosciences processes have changed Earth's surface at varying time and spatial scales.	ESS2-2	RST.6-8.7, RST.6-8.9	WHST.6-8.8	SL.8.5	6.EE.B.6, 7.EEB.4
6			Summative Unit Assessment & Introduction to Green School Project 4	ESS2-1, ESS2-2									
7 8 9	Unit 11	Water on Earth	Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions	ESS2-3	RST.6-8.1, RST.6-8.7, RST.6-8.9	WHST.6-8.2, WHST.6-8.8	SL.8.5	MP.2, 6.NS.C.5, 6.EE.B.6, 7.EEB.4	9.1	8.1 & 8.2			
10 11		Editii	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	ESS2-4									
12			Summative Unit Assessment	ESS2-3, ESS2-4									
13 14 15	Unit 12	Weather	Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions	ESS2-5	RST.6-8.1, WHST.6-8. RST.6-8.7, WHST.6-8. RST.6-8.9	WHST 6-8 2		MP.2, 6.NS.C.5, 6.EE.B.6, 7.EEB.4	9.1	8.1 & 8.2			
16 17 18	Oint 12	Patterns	Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation and determine regional climates.	ESS2-6		WHST.6-8.8	SL.8.5						
19			Summative Unit Assessment & Completion of Green School Project 4	ESS-5, ESS2-6									
20	_		Review for Final	PS 4, PS 3, ESS 2			•	_	•				
21 22 23			Final										